

CLAIMS

1. A method of producing a gas barrier laminate, comprising: preparing a laminate comprising a plastic substrate, a gas barrier layer formed from a gas barrier layer-forming
5 coating material comprising a polyvinyl alcohol and an ethylene-maleic acid copolymer, and a polymer layer comprising a metal compound of a bivalent or higher metal, wherein the polymer layer is laminated to at least one surface of the gas barrier layer; and heat treating the obtained laminate in the presence of water.
2. The method of producing a gas barrier laminate according to claim 1, wherein the
10 polymer layer is an undercoat layer positioned between the plastic substrate and the gas barrier layer.
3. A method of producing a gas barrier laminate, comprising: applying a gas barrier layer-forming coating material comprising a polyvinyl alcohol and an ethylene-maleic acid copolymer, either directly onto a plastic substrate, or onto a plastic substrate with an
15 undercoat layer disposed therebetween, and then conducting a heat treatment; and heat treating the obtained laminate in the presence of water comprising a metal compound of a bivalent or higher metal.
4. The method of producing a gas barrier laminate according to either claim 2 or 3, wherein the undercoat layer is formed from a polyester polyol with a glass transition
20 temperature of at least 0°C, and a polyisocyanate.
5. The method of producing a gas barrier laminate according to any one of claims 1 through 4, wherein the metal compound is capable of reacting with hydroxyl groups or carboxyl groups.
6. The method of producing a gas barrier laminate according to any one of claims 1
25 through 5, wherein the metal compound comprises one or more compounds selected from the group consisting of hydroxides, carbonates, acetates, and phosphates of bivalent or higher metals.
7. The method of producing a gas barrier laminate according to claim 6, wherein the
30 metal compound comprises at least one hydroxide or carbonate of a bivalent or higher metal.
8. The method of producing a gas barrier laminate according to any one of claims 1 through 7, wherein the bivalent or higher metal is Mg and/or Ca.

9. The method of producing a gas barrier laminate according to any one of claims 1 through 8, wherein a weight ratio between the polyvinyl alcohol and the ethylene-maleic acid copolymer within the gas barrier layer-forming coating material falls within a range from 90:10 to 10:90.

- 5 10. The method of producing a gas barrier laminate according to any one of claims 1 through 9, wherein the heat treatment conducted in the presence of water is conducted at 90°C or higher.